

109TH CONGRESS
2D SESSION

H. R. 5356

To authorize the National Science Foundation and the Department of Energy Office of Science to provide grants to early career researchers to establish innovative research programs and integrate education and research, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

MAY 11, 2006

Mr. McCAUL of Texas (for himself, Mr. BOEHLERT, Mr. SMITH of Texas, Mr. CALVERT, Mr. EHLERS, Mrs. BIGGERT, Mr. INGLIS of South Carolina, and Mr. SCHWARZ of Michigan) introduced the following bill; which was referred to the Committee on Science

A BILL

To authorize the National Science Foundation and the Department of Energy Office of Science to provide grants to early career researchers to establish innovative research programs and integrate education and research, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Early Career Research
5 Act”.

1 **SEC. 2. NATIONAL SCIENCE FOUNDATION EARLY CAREER**
2 **AWARDS FOR SCIENCE AND ENGINEERING**
3 **RESEARCHERS.**

4 (a) IN GENERAL.—The Director of the National
5 Science Foundation shall carry out a program to award
6 grants to scientists and engineers at the early stage of
7 their careers at institutions of higher education and re-
8 search institutions to conduct research in fields relevant
9 to the mission of the Foundation. The existing Faculty
10 Early Career Development (CAREER) Program may be
11 designated as the mechanism for awarding such grants.

12 (b) SIZE AND DURATION OF AWARD.—The duration
13 of awards under this section shall be 5 years, and the
14 amount per year shall be at least \$80,000.

15 (c) ELIGIBILITY.—Award recipients shall be individ-
16 uals who are employed in a tenure-track position as an
17 assistant professor or equivalent title, or who hold an
18 equivalent position, at—

19 (1) an institution of higher education in the
20 United States; or

21 (2) an organization in the United States that is
22 a nonprofit, nondegree-granting research organiza-
23 tion such as a museum, observatory, or research lab-
24 oratory.

25 (d) SELECTION.—Award recipients shall be selected
26 on a merit-reviewed and competitive basis.

1 (e) SELECTION PROCESS AND CRITERIA FOR
2 AWARDS.—An applicant seeking funding under this sec-
3 tion shall submit a proposal to the Director at such time,
4 in such manner, and containing such information as the
5 Director may require. In evaluating the proposals sub-
6 mitted under this section, the Director shall consider, at
7 a minimum—

8 (1) the intellectual merit of the proposed work;

9 (2) the innovative or transformative nature of
10 the proposed research;

11 (3) the extent to which the proposal integrates
12 research and education, including undergraduate
13 education in science and engineering disciplines; and

14 (4) the potential of the applicant for leadership
15 at the frontiers of knowledge.

16 (f) AUTHORIZATION OF APPROPRIATIONS.—For each
17 of the fiscal years 2007 through 2011, the Director shall
18 allocate at least 3.5 percent of funds appropriated to the
19 National Science Foundation for Research and Related
20 Activities to the grants program under this section.

21 (g) REPORT.—Not later than 6 months after the date
22 of enactment of this Act, the Director shall provide to the
23 Committee on Science of the House of Representatives
24 and to the Committee on Commerce, Science, and Trans-
25 portation of the Senate a report describing the distribution

1 of the institutions of the awardees of the Faculty Early
2 Career Development Program since fiscal year 2001
3 among each of the categories of institutions of higher edu-
4 cation defined by the Carnegie Foundation for the Ad-
5 vancement of Teaching and the organizations in sub-
6 section (c)(2).

7 (h) EVALUATION.—Not later than 2 years after the
8 date of enactment of this Act, the Director shall provide
9 to the Committee on Science of the House of Representa-
10 tives and to the Committee on Commerce, Science, and
11 Transportation of the Senate a report evaluating the im-
12 pact of the Faculty Early Career Development Program
13 on the ability of young faculty to compete for National
14 Science Foundation research grants.

15 **SEC. 3. DEPARTMENT OF ENERGY EARLY CAREER AWARDS**
16 **FOR SCIENCE AND ENGINEERING RESEARCH-**
17 **ERS.**

18 (a) IN GENERAL.—The Under Secretary for Science
19 of the Department of Energy shall carry out a program
20 to award grants to scientists and engineers at the early
21 stage of their careers at institutions of higher education
22 and research institutions to conduct research in fields rel-
23 evant to the mission of the Department.

1 (b) SIZE AND DURATION OF AWARD.—The duration
2 of awards under this section shall be up to 5 years, and
3 the amount per year shall be at least \$80,000.

4 (c) ELIGIBILITY.—Award recipients shall be individ-
5 uals who are employed in a tenure-track position as an
6 assistant professor or equivalent title, or who hold an
7 equivalent position, at—

8 (1) an institution of higher education in the
9 United States; or

10 (2) an organization in the United States that is
11 a nonprofit, nondegree-granting research organiza-
12 tion such as a museum, observatory, or research lab-
13 oratory.

14 (d) SELECTION.—Award recipients shall be selected
15 on a merit-reviewed and competitive basis.

16 (e) SELECTION PROCESS AND CRITERIA FOR
17 AWARDS.—An applicant seeking funding under this sec-
18 tion shall submit a proposal to the Under Secretary at
19 such time, in such manner, and containing such informa-
20 tion as the Under Secretary may require. In evaluating
21 the proposals submitted under this section, the Under Sec-
22 retary shall consider, at a minimum—

23 (1) the intellectual merit of the proposed work;

24 (2) the innovative or transformative nature of
25 the proposed research;

1 (3) the extent to which the proposal integrates
2 research and education, including undergraduate
3 education in science and engineering disciplines; and
4 (4) the potential of the applicant for leadership
5 at the frontiers of knowledge.

6 (f) COLLABORATION WITH NATIONAL LABORA-
7 TORIES.—In awarding grants under this section, the
8 Under Secretary shall give priority to proposals in which
9 the proposed work includes collaboration with the Depart-
10 ment of Energy National Laboratories.

11 (g) AUTHORIZATION OF APPROPRIATIONS.—There
12 are authorized to be appropriated to the Secretary of En-
13 ergy to carry out the Under Secretary's responsibilities
14 under this section \$25,000,000 for each of the fiscal years
15 2007 through 2011.

16 (h) REPORT ON RECRUITING AND RETAINING EARLY
17 CAREER SCIENCE AND ENGINEERING RESEARCHERS AT
18 THE NATIONAL LABORATORIES.—Not later than 3
19 months after the date of enactment of this Act, the Sec-
20 retary of Energy shall provide a report to the Committee
21 on Science of the House of Representatives and to the
22 Committee on Energy and Natural Resources of the Sen-
23 ate on efforts to recruit and retain young scientists and
24 engineers at the early stages of their careers at the De-

1 partment of Energy National Laboratories. The report
2 shall include—

3 (1) a description of Department of Energy and
4 National Laboratory policies and procedures, includ-
5 ing financial incentives, awards, promotions, time set
6 aside for independent research, access to equipment
7 or facilities, and other forms of recognition, designed
8 to attract and retain young scientists and engineers;

9 (2) an evaluation of the impact of these incen-
10 tives on the careers of young scientists and engi-
11 neers at Department of Energy National Labora-
12 tories, and also on the quality of the research at the
13 National Laboratories and in Department of Energy
14 programs;

15 (3) a description of what barriers, if any, exist
16 to efforts to recruit and retain young scientists and
17 engineers, including limited availability of full time
18 equivalent positions, legal and procedural require-
19 ments, and pay grading systems; and

20 (4) the amount of funding devoted to efforts to
21 recruit and retain young researchers and the source
22 of such funds.

1 **SEC. 4. REPORT ON NATIONAL INSTITUTE OF STANDARDS**
2 **AND TECHNOLOGY EFFORTS TO RECRUIT**
3 **AND RETAIN EARLY CAREER SCIENCE AND**
4 **ENGINEERING RESEARCHERS.**

5 Not later than 3 months after the date of enactment
6 of this Act, the Director of the National Institute of
7 Standards and Technology shall provide a report to the
8 Committee on Science of the House of Representatives
9 and to the Committee on Commerce, Science, and Trans-
10 portation of the Senate on efforts to recruit and retain
11 young scientists and engineers at the early stages of their
12 careers at the National Institute of Standards and Tech-
13 nology laboratories and joint institutes. The report shall
14 include—

15 (1) a description of National Institute of Stand-
16 ards and Technology policies and procedures, includ-
17 ing financial incentives, awards, promotions, time set
18 aside for independent research, access to equipment
19 or facilities, and other forms of recognition, designed
20 to attract and retain young scientists and engineers;

21 (2) an evaluation of the impact of these incen-
22 tives on the careers of young scientists and engi-
23 neers at the National Institute of Standards and
24 Technology, and also on the quality of the research
25 at the National Institute of Standards and Tech-

1 nology’s laboratories and in the National Institute of
2 Standards and Technology’s programs;

3 (3) a description of what barriers, if any, exist
4 to efforts to recruit and retain young scientists and
5 engineers, including limited availability of full time
6 equivalent positions, legal and procedural require-
7 ments, and pay grading systems; and

8 (4) the amount of funding devoted to efforts to
9 recruit and retain young researchers and the source
10 of such funds.

11 **SEC. 5. DEFINITION.**

12 In this Act, the term “institution of higher edu-
13 cation” has the meaning given such term in section 101(a)
14 of the Higher Education Act of 1965 (20 U.S.C. 1001(a)).

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